

## STATE OF TENNESSEE DEPARTMENT OF TRANSPORTATION

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JOHN C. SCHROER COMMISSIONER BILL HASLAM GOVERNOR

August 15, 2011

Mr. Julius Genachowski, Chairman Federal Communications Commission 445 12th Street, S.W. Washington, D.C. 20554

Re: FCC File No. SAT-MOD-201011118-00239

Dear Chairman Genachowski:

Pursuant to the reply period on Proceeding Number 11-109, which is ending on August 15, 2011 on the FFC File No. SAT-MOD-201011118-00239, this letter is written on behalf of the Tennessee Department of Transportation (TDOT). We would like to express our concern about the LightSquared system proposed to operate the ancillary terrestrial component of their mobile satellite service in the bands adjacent to those used by GPS.

TDOT has been a leader in GPS technology, including the creation of the first High Accuracy Reference Network (HARN) in the United States. In addition to those historical accomplishments, TDOT has made a significant investment in GPS technology over the past decade, including a statewide network of permanently mounted GPS base stations that provides real time corrections to all sectors, and the use of Survey Grade GPS equipment in each TDOT Administrative Region. These \$1.5 million investments in GPS technology has been funded through TDOT Fixed Asset purchases.

The potential widespread implementation of 4G/LTE broadband as proposed by LightSquared may interfere with our GPS technology. We would not be able to quickly fund new equipment, additional filtering equipment or retrofit existing equipment to compensate for such interference. Loss of the productivity gained by the use of GPS technology in road design and construction is a very real concern if licenses are granted to implement this technology.

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Advancing broadband deployment should not come at the expense of previously established, critical assets. GPS is an integral part of Tennessee's infrastructure, and the day to day operation of the Tennessee Department of Transportation. We would request that any organization proposing services in bands immediately adjacent to the radio navigation satellite service band bear the responsibility of eliminating interference to GPS.

Thank you for allowing us to comment on the proposed broadband deployment. If you have any questions you would like to discuss, please do not hesitate to contact me at (615) 741-0791 or by email at Paul.Degges@tn.gov.

Sincerely,

Paul D. Degges, P.E.

Chief Engineer

PDD/JW/jc

Cc: Ms. Carolyn Stonecipher, TDOT

Mr. Jim Waters, TDOT